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NOTICE OF ALLOWANCE AND FEE(S) DUE

24011 7590 06/27/2908 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET

BALMAIN, 2041

ALISTRALIA

EXAMINER
FIDLER, SHELBY LEE
ART UNIT PAPER NUMBER

2861 DATE MAILED: 06/27/2008

APELICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKIET NO. CONFRMATION NO. 10773.184 02/09/2004 Kia Silverbrook MTB 36US 8429

TITLE OF INVENTION: THERMAL INK JET PRINTHEAD WITH HEATER ELEMENT CURRENT FLOW AROUND NOZZLE AXIS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/29/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	of transmitting the 1330 ig the Patent, advance or ierwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wi pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
24011 SILVERBROC 393 DARLING BALMAIN, 204 AUSTRALIA			I bo	Cert	ificate	of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
AUSTRALIA							(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/773,184 TITLE OF INVENTION	02/09/2004 I: THERMAL INK JET I	PRINTHEAD WITH HEA	Kia Silverbrook ATER ELEMENT CURRE	ENT FLOW AROU!	ND NO	MTB36US OZZLE AXIS	8429
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	09/29/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]			
FIDLER, SE	IELBY LEE	286I	347-062000	•			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT/ less an assignee is ident h in 37 CFR 3.II. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternati- (2) the name of a single registered attorney or a 2 registered practice of practice tisted, no name will be ITHE PATENT (print or ty) data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	3 registered patent vely, e firm (having as a agent) and the name rneys or agents. If n printed.	memb s of u so nam	er a 2	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent):	Individual 🚨 Cor	rporati	on or other private gro	oup entity Government
Advance Order -	wo small entity discount p	permitted)	o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched.	shown above) ficiency, or credit any n extra copy of this form).
5. Change in Entity Sta a. Applicant claim	tus (from status indicated is SMALL ENTITY statu		☐ b. Applicant is no lon	ger claiming SMAL	LEN	TITY status. Sec 37 Cl	FR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regis	tered :	ittorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR (on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor er, U.S. Patent and 1 D THIS ADDRESS.	e publ ninutes mment Fraden SENI	ic which is to file (and to complete, includir s on the amount of ti- nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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24011 75	90 06/27/2008		EXAM	UNER	
SILVERBROOK RESEARCH PTY LTD			FIDLER, SHELBY LEE		
393 DARLING ST	REET		ART UNIT	PAPER NUMBER	
BALMAIN, 2041 AUSTRALIA			2861 DATE MAILED: 06/27/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 180 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 180 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/773,184	SILVERBROOK, KIA
Examiner	Art Unit
SHELBY FIDLER	2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to amendments filed 1/22/2008.
- The allowed claim(s) is/are 1-8,10-22,24-27,29-44 and 46-54.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 - 1) hereto or 2) to Paper No./Mail Date
 - Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

/Shelby Fidler/ Examiner, Art Unit 2861 Application/Control Number: 10/773,184

Art Unit: 2861

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given via email correspondence with Nina Lee, acting for Mr. Kia Silverbrook, on 5/19/2008.

Amendments to the claims have been made as follows:

Regarding claim 1:

At the end of the claim, "so that the electrodes are non-coincident" has been changed to "so that respective associated electrodes corresponding to each heater element are non-coincident with each other."

Regarding claim 19:

At the end of the claim, "so that the electrodes are non-coincident" has been changed to "so that respective associated electrodes corresponding to each heater element are non-coincident with each other."

Regarding claim 38:

On line 11 of the claim, "so that the electrodes are non-coincident" has been changed to "so that respective associated electrodes corresponding to each heater element are non-coincident with each other".

Application/Control Number: 10/773,184

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Allowable Subject Matter

Claims 1-8, 10-22, 24-27, 29-44, and 46-54 are allowed.

Claims 1-8, 10-22, 24-27, 29-44, and 46-54 are allowable over the prior art of record, since the prior art does not disclose, teach, or suggest a printhead comprising a plurality of heater elements disposed in each of the bubble forming chambers, wherein the heater elements and associated electrodes in each bubble forming chamber are arranged so that respective associated electrodes corresponding to each heater element are non-coincident with each other. It is this combination of limitations, in combination with other features and limitations of claims 1, 19, and 38, respectively, that makes these claims allowable over the prior art of record.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Manaka (JP 62094347) disclose a plurality of heater elements (16a1, 16a2) suspended within each bubble forming chamber (Fig. 6a). However, these heater elements share the same electrodes. Manaka also discloses a plurality of elements (16a, 26a) suspended within each bubble forming chamber, wherein the associated electrodes corresponding to each element are non-coincident with each other (Fig. 26). However, one of these elements corresponds to a detection element rather than a heater element.

Examiner notes that a modification of the detection electrode would not render the claims obvious, since Examiner was unable to find sufficient motivation to provide Application/Control Number: 10/773,184

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the detection element with a bubble nucleation section such as that disclosed in the currently amended claims.

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Communication with the USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHELBY FIDLER whose telephone number is (571)272-8455. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUU MATTHEW/ Supervisory Patent Examiner, Art Unit 2861

/Shelby Fidler/ Patent Examiner AU 2861